



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,406	07/24/2001	Richard H. Lewis	60980038-2	4796

7590 10/16/2003

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P. O. Box 272400
Fort Collins, CO 80528-9599

EXAMINER

NGHIEM, MICHAEL P

ART UNIT PAPER NUMBER

2863

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,406

Applicant(s)

LEWIS ET AL.

Examiner

Michael P Nghiem

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 and 4-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 4-12 is/are allowed.
- 6) ☒ Claim(s) 13-15 is/are rejected.
- 7) ☒ Claim(s) 16-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

The Amendment filed on July 22, 2003 has been acknowledged.

Withdrawal of Allowability

1. The indicated allowability of claim 13 is withdrawn in view of the newly discovered reference(s) to Toshio (JP 10-138506). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Toshio (JP 10-138506).

Toshio discloses all the claimed features of the invention including:

Art Unit: 2863

- a method of providing ink from an external ink supply (41) to an inkjet printhead (each part of 1 corresponding to each of 51's) comprising:

- providing an auxiliary supply of ink in a collapsible bag (43) inside of a protective enclosure (42);

- connecting the auxiliary ink supply with a print cartridge (5) through an ink delivery conduit (51);

- subjecting the collapsible bag to air pressure greater than ambient air pressure to facilitate transmission of the ink from the auxiliary supply of ink to the print cartridge during ink ejection from the inkjet printhead (Fig. 1);

- monitoring the air pressure of said subjecting step (via 62);

- controlling operation of an air compressor (61) in order to accelerate an increase of the air pressure applied to the collapsible bag during a non-printing startup mode (from startup to before supplying ink) as well as stabilize the air pressure applied to the collapsible bag during a different operational printing mode in accordance with predetermined parameters (printing);

- providing a plurality of inkjet printheads (parts of 1) each respectively connected to its own separate auxiliary supply of ink (51's connect to parts of 1, Figs. 1, 2);

- subjecting all of the separate auxiliary supplies of ink to a predetermined sequence of air pressures greater than ambient air pressure (via 61);

- reducing the air pressure applied to the collapsible bag to maintain the air pressure below a predetermined maximum level (during stop printing process);

- leaking air from the protective enclosure to prevent undesirable excessive air pressure applied to the collapsible bag (via 63, translation, paragraph 0031, lines 2-3).

Allowable Subject Matter

3. Claims 16-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 2 and 4-12 are allowed.

Reasons For Allowance

5. The combination or method as claimed wherein a plurality of ink supply modules all connected to said air supply interface so that ink in said plurality of ink supply modules may be subjected to predetermined positive pressures greater than ambient air pressure (claim 5) or providing an auxiliary supply of black ink and a separate auxiliary supply of color ink, and applying increased air pressure during a startup mode until reaching a minimum threshold positive pressure based on black or color ink printing parameters, and then applying a different lower air pressure during an operational printing mode (claim 16) or providing an auxiliary supply of black ink and a separate auxiliary supply of color ink, and applying different air pressure during a

Art Unit: 2863

startup mode or an operational mode based on a determination of an amount of ink left in the auxiliary ink supplies (claim 17) or operating an air compressor at a first speed during the non-printing startup mode, and operating the air compressor at a lesser speed during the different operational print mode to maintain the air pressure applied to the collapsible bag during the operational print mode above a minimum operation pressure for a printhead as well as below a predetermined maximum operating pressure (claim 18) is not disclosed, suggested, or made obvious by the prior art of record.

Response to Arguments

6. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.


Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (703) 308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-5841 for After Final communications.

Art Unit: 2863

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



MICHAEL NGHIEM
PRIMARY EXAMINER

Michael Nghiem

October 1, 2003